

Attorney's Docket No. 24-0128
Client's Docket No. 14107

APPLICATION

FOR UNITED STATES LETTERS PATENT

SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN THAT I, **DR. BASKARAN C. NAIR**, a citizen of UNITED STATES OF AMERICA, have invented a new and useful **ARTIFICIAL WIND PRODUCING FLAG POLE ASSEMBLY** of which the following is a specification:

ARTIFICIAL WIND PRODUCING FLAG POLE ASSEMBLY

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CROSS REFERENCE TO RELATED APPLICATION

This application claims the benefit of U.S. Provisional Application No. 60/458,134, filed March 27, 2003.

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BACKGROUND OF THE INVENTION

Field of the Invention

15 The present invention relates to flag poles and more particularly pertains to a new artificial wind producing flag pole assembly for providing airflow in windless conditions to display a flag in an unfurled position as if a steady wind was present.

20 Description of the Prior Art

The use of flag poles is known in the prior art. U.S. Patent No. 2,270,753 describes a device for directing air over the surface of a flag to keep the flag unfurled. Another type of flag pole is U.S. Patent No. 1,725,250 having a fan coupled to a motor and positioned in the base of a flagpole to blow air through the flagpole to keep the flag in an unfurled state. U.S. Patent No. 1,660,341 has a fan coupled to a hollow flagpole with ports extending into the flagpole to allow air to escape to keep a flag unfurled. U.S. Patent No. 5,427,050 having an air blower positioned in the base of the flagpole that blows air out of the base and is directed towards the flag to keep the flag unfurled.

While these devices fulfill their respective, particular objectives and requirements, the need remains for a device that has certain improved features to allow the air blower to counter to 5 force exerted on the flag pole when the flag is unfurled.

SUMMARY OF THE INVENTION

10 The present invention meets the needs presented above by providing the blower assembly coupled to the side of the base member opposite the clip members so that the flag extends away from the blower assembly to allow the weight of the blower assembly balance the force applied to the flagpole when the flag is 15 unfurled.

Still yet another advantage of the present invention is to provide a new artificial wind producing flag pole assembly that has a planar bottom face of the base member positioned below the 20 flagpole to resisting tipping of the flagpole from any forced applied to the flagpole when the flag is unfurled.

To this end, the present invention generally comprises a flagpole having a hollow interior. An air blower is coupled to a 25 base of the flagpole for producing airflow into and through the hollow interior of the flagpole. A top portion of the flagpole has a plurality of holes to direct the airflow from the interior of the flagpole out towards a flag connected to the flagpole. The airflow coming out of the holes holds the flag in an unfurled position

30 There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed

description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter 5 of the claims appended hereto.

The objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this 10 disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects other than 15 those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

Figure 1 is a perspective view of a new artificial wind 20 producing flag pole assembly according to the present invention.

Figure 2 is a cross-sectional view of the present invention taken along line 2-2 of Figure 1.

25 DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to Figures 1 and 2 thereof, a new artificial wind producing flag pole assembly embodying the principles and concepts of the present 30 invention and generally designated by the reference numeral 10 will be described.

As best illustrated in Figures 1 and 2, the artificial wind producing flag pole assembly 10 generally comprises a base member 12 being designed for being positioned on a support surface.

5 A blower assembly 14 is coupled to the base member 12 whereby the blower assembly 14 is in fluid communication with the base member 12. The blower assembly 14 is designed for blowing air into the base member 12.

10 A flagpole 16 is coupled to the base member 12 whereby the flagpole 16 is in fluid communication with the base member 12. The flagpole 16 is positioned opposite the blower assembly 14 whereby the blower assembly 14 is designed for blowing air through the base member 12 into the flagpole 16. The flagpole 16
15 comprising a plurality of exhaust apertures 18 extending into the flagpole 16 whereby each of the exhaust apertures 18 allow air blown into the flagpole 16 to be exhausted. The flagpole 16 is designed for receiving the flag whereby the flag is positioned proximate the exhaust apertures 18 to allow the air exhausted
20 through the exhaust apertures 18 to flow over the flag and maintain the flag in the unfurled position.

25 A plurality of clip members 20 are coupled to the flagpole 16. Each of the clip members 20 is designed for being selectively coupled to the flag whereby the clip members 20 are for coupling the flag to the flagpole 16.

30 The clip members 20 are positioned in a space relationship proximate a top end 22 of the flag pole. The clip members 20 are designed for being selectively coupled to a base edge of the flag

whereby the clip members 20 maintain the base edge of the flag in a substantially vertical position and substantially aligned with a longitudinal axis of the flagpole 16 when the clip members 20 are coupled to the base edge of the flag.

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The exhaust apertures 18 of the flagpole 16 are aligned with the clip members 20 whereby the exhaust apertures 18 are positioned between the clip members 20. The exhaust apertures 18 are designed for being aligned with the base edge of the flag 10 whereby the exhaust apertures 18 exhaust the air over the base edge and along the sides of the flag to unfurl the flag when the flag is coupled to the clip members 20.

The clip members 20 are positioned opposite the blower assembly 14. The clip members 20 are designed for permitting the flag to extend outwardly from the flagpole 16 in a direction opposite the blower assembly 14 whereby a weight of the blower assembly 14 facilitates stability of the flagpole 16 by balancing a force applied to the flagpole 16 by the flag when the flag is 20 unfurled.

The flagpole 16 comprises a perimeter wall 24. The perimeter wall 24 defines a venting bore 26 extending along a portion of a length of the flagpole 16. Each of the exhaust apertures 18 extends 25 through the perimeter wall 24 whereby each of the exhaust apertures 18 is in fluid communication with the venting bore 26. The venting bore 26 comprises an open end 28 in fluid communication with the base member 12 whereby air supplied by the blower assembly 14 enters the venting bore 26 through the open

end 28 and is exhausted from the venting bore 26 through the exhaust apertures 18.

The base member 12 comprises a transfer bore 30. The 5 transfer bore 30 extends through the base member 12 whereby transfer bore 30 is in fluid communication with the blower assembly 14 and the open end 28 of the venting bore 26 of the flagpole 16. The transfer bore 30 of the base member 12 is designed for permitting air flow produced by the blower assembly 10 14 to be directing into the venting bore 26 of the flagpole 16.

The base member 12 comprises an upper face 32, a bottom face 34 and a perimeter face 36. The perimeter face 36 extends between the upper face 32 and the bottom face 34. The blower assembly 14 is coupled to the perimeter face 36 of the base member 15 12. The flagpole 16 is coupled to the upper face 32 of the base member 12 whereby the flagpole 16 extends upwardly from the base member 12. The bottom face 34 is designed for being positioned on the support surface. The bottom face 34 of the base member 12 is 20 substantially planar whereby the bottom face 34 resists tipping of the base member 12 and the flagpole 16 when the base member 12 is positioned on the support surface and the flag is unfurled from the flagpole 16.

25 In use, the user couples the flag to the clip members 20. The blower assembly 14 is actuated to blow air into the flagpole 16. As the air is exhausted out of the exhaust apertures 18 of the flagpole 16 the air passes over the flag and unfurls the flag as if the flag was in a steady wind.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed 5 readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

10 Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable 15 modifications and equivalents may be resorted to, falling within the scope of the invention.